

UTAH DIVISION OF OIL, GAS AND MINING

REMARKS: WELL LOG — ELECTRIC LOGS — FILE X WATER SANDS — LOCATION INSPECTED — SUB. REPORT/ABD.

DATE FILED 5-3-78

LAND: FEE & PATENTED

STATE LEASE NO.

PUBLIC LEASE NO. U-130-28

INDIAN

DRILLING APPROVED: 5-3-78

SPUDDED IN:

COMPLETED:

PUT TO PRODUCING:

INITIAL PRODUCTION:

GRAVITY A.P.I.

GOR:

PRODUCING ZONES:

TOTAL DEPTH:

WELL ELEVATION: 6188' su

DATE ABANDONED: 12/27/78 Location Abandoned, well never drilled

FIELD: Wildcat 3/86

UNIT:

COUNTY: San Juan

WELL NO. Hook & Ladder Fed. 4-31

API NO: 43-037-30435

LOCATION 459'

FT. FROM (N) XX LINE.

836'

FT. FROM XX (W) LINE.

NW NW

1/4 - 1/4 SEC. 31

TWP.

RGE.

SEC.

OPERATOR

TWP.

RGE.

SEC.

OPERATOR

29S

24E

31

HUSKY OIL COMPANY

Location Abandoned - 12/28/78

FILE NOTATIONS

Entered in NID File
Location Map Pinned
Card Indexed

Checked by Chief
Approval Letter
Disapproval Letter

COMPLETION DATA:

Date Well Completed
NW..... WW..... TA.....
GW..... OS..... EA.....

Location Inspected
Bond released
State or Fee Land

LOGS FILED

Driller's Log.....
Electric Logs (No.)
E..... I..... Dual I Lat..... GR-N..... Micro.....
BHC Sonic GR..... Lat..... MI-L..... Sonic.....
CBLog..... CLog..... Others.....

LWP
205-91

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL & GAS

SUBMIT IN TRIPPLICATE*
(Other instructions on reverse side)

U-130-28

5. Lease Designation and Serial No.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. Type of Well

Oil Well ☐Gas Well ☒Other ☐

2. Name of Operator

Husky Oil Company

3. Address of Operator

600 South Cherry Street, Denver, Colorado

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface

459' FNL and 836' FWL, NW 1/4 NW 1/4, Sec. 31-24E-29S

At proposed prod. zone

Same bottom hole location as surface location

14. Distance in miles and direction from nearest town or post office*

Approximately 12 miles southwest of LaSal, Utah

15. Distance from proposed*

location to nearest

property or lease line, ft.

(Also to nearest drlg. line, if any)

459' (FNL)

16. No. of acres in lease

853.04

17. No. of acres assigned to this well

206.26

18. Distance from proposed location* to nearest well, drilling, completed, or applied for, on this lease, ft.

1600'

19. Proposed depth

9900'

20. Rotary or cable tools

Rotary

21. Elevations (Show whether DF, RT, GR, etc.)

6188 Graded (6204.3' K.B.)

22. Approx. date work will start*

September 1, 1978

23.

PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
17 1/2"	13 3/8" New	54.5#/Ft.	+1500'	Sufficient to circulate
12 1/4"	9 5/8" New	36.0#/Ft.	+5500'	100 Sacks
8 1/2"	7" New	26#/Ft.	+9900'	100 Sacks
		32#/Ft.		
		and 35#/Ft.		

Drill 17 1/2" hole to +1500'. Run and cement 13 3/8" casing. Drill out with 12 1/4" bit to +5500' (Paradox Salt). Run and cement 9 5/8" casing. Drill out with 8 1/2" bit to +9900'. Log and evaluate hole. Run and cement 7" production casing if warranted by log evaluation. If evaluation shows well to be non-commercial, it will be plugged and abandoned in accordance with U.S.G.S. regulations.

APPROVED BY THE DIVISION OF
OIL, GAS, AND MINING

DATE: 5-4-78

BY: C.B. Light

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

Signed: C. H. Wolt

Title: Drilling Engineer

Date: 4-25-78

(This space for Federal or State office use)

Permit No. 43-087-30435

Approval Date

Approved by:

Title:

Date:

Conditions of approval, if any:

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL & GAS

SUBMIT IN TRIPPLICATE*
(Other instructions on
reverse side)

U-130-28

5. Lease Designation and Serial No.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. Type of Well

Oil Well ☐Gas Well ☒Other ☐Single Zone ☐Multiple Zone ☐

2. Name of Operator

Husky Oil Company

3. Address of Operator

600 South Cherry Street, Denver, Colorado

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface

459' FNL and 836' FWL, NW 1/4 NW 1/4, Sec. 31-24E-29S

At proposed prod. zone

Same bottom hole location as surface location

14. Distance in miles and direction from nearest town or post office*

Approximately 12 miles southwest of LaSal, Utah

15. Distance from proposed*

location to nearest property or lease line, ft. (Also to nearest drlg. line, if any)

459' (FNL)

16. No. of acres in lease

853.04

17. No. of acres assigned to this well

206.26

18. Distance from proposed location* to nearest well, drilling, completed, or applied for, on this lease, ft.

1600'

19. Proposed depth

9900'

20. Rotary or cable tools

Rotary

21. Elevations (Show whether DF, RT, GR, etc.)

6188 Graded (6204.3' K.B.)

22. Approx. date work will start*

September 1, 1978

23.

PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
17 1/2"	13 3/8" New	54.5#/Ft.	+1500'	Sufficient to circulate 100 Sacks
12 1/4"	9 5/8" New	36.0#/Ft.	+5500'	
8 1/2"	7" New	and 40#/Ft. 26#/Ft. 32#/Ft. and 35#/Ft.	+9900'	100 Sacks

Drill 17 1/2" hole to +1500'. Run and cement 13 3/8" casing. Drill out with 12 1/4" bit to +5500' (Paradox Salt). Run and cement 9 5/8" casing. Drill out with 8 1/2" bit to +9900'. Log and evaluate hole. Run and cement 7" production casing if warranted by log evaluation. If evaluation shows well to be non-commercial, it will be plugged and abandoned in accordance with U.S.G.S. regulations.

APPROVED BY THE DIVISION OF
OIL, GAS, AND MINING

DATE: 5-4-78

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations, depths, and directional depths. Give blowout preventer program, if any.

24.

Signed

C. H. Walt

Title Drilling Engineer

Date 4-25-78

(This space for Federal or State office use)

Permit No.

Approval Date

Approved by

Title

Date

Conditions of approval, if any:

WELL LOCATION PLAT

T4 COR. SEC. 25
FOUND '+' IN ROCK

R. 24 E

WEST 6037 (REEL)

HUSKY FED. 4-31
O.G. ELEV. 6189

LOT 1

31

77615

BEARINGS BASED ON WILLIAM 52611
T29S, R24E, SLASH (N0007E)

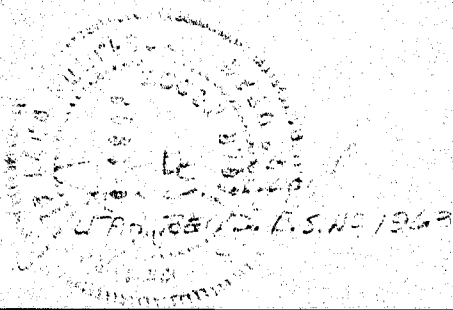
BEARINGS FOR SECTION 11
T 29 S, R 29 E, S 11 E (N 0° 12' E)

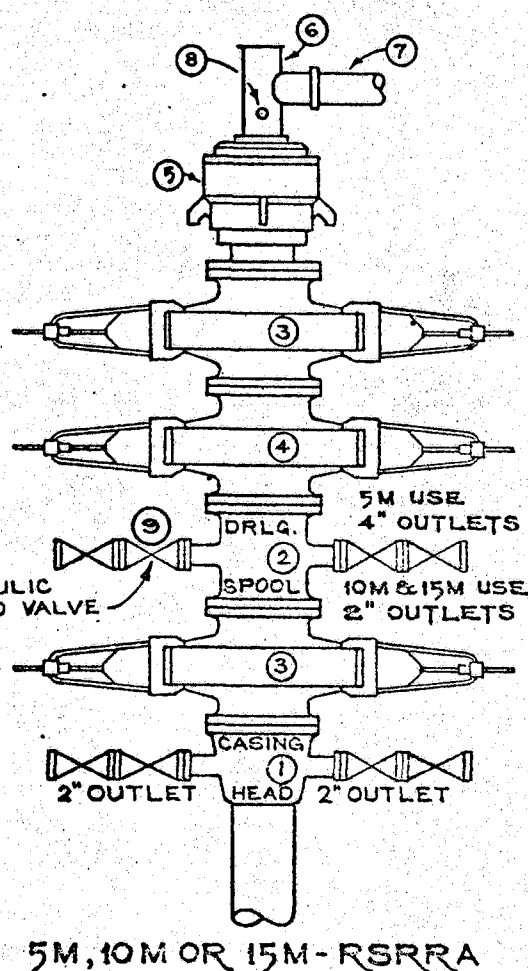
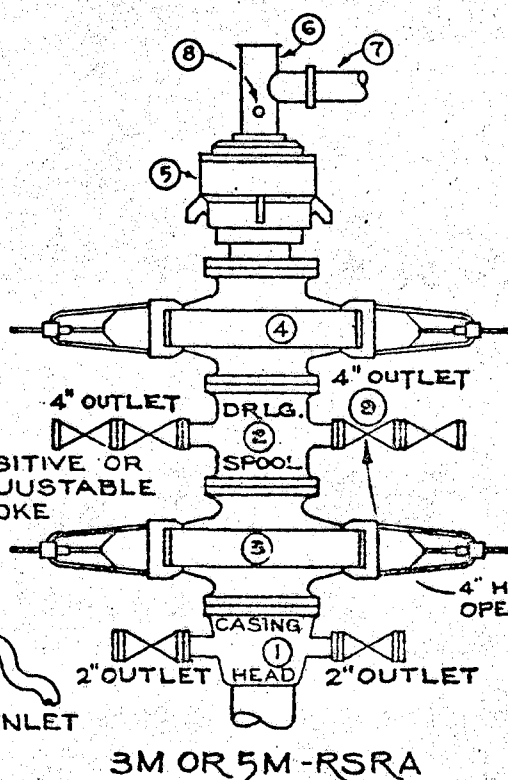
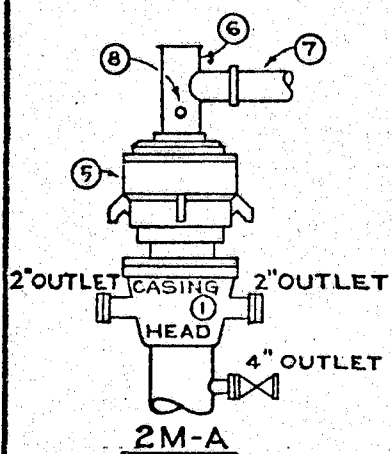
605-111250

FROM U.S.G. # 7070. MAP.

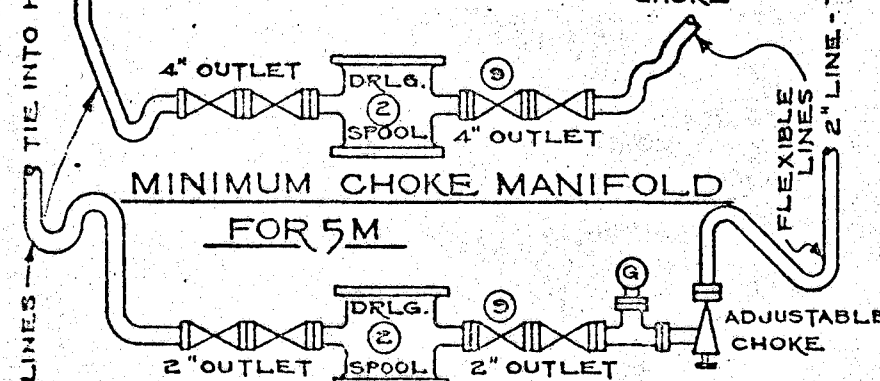
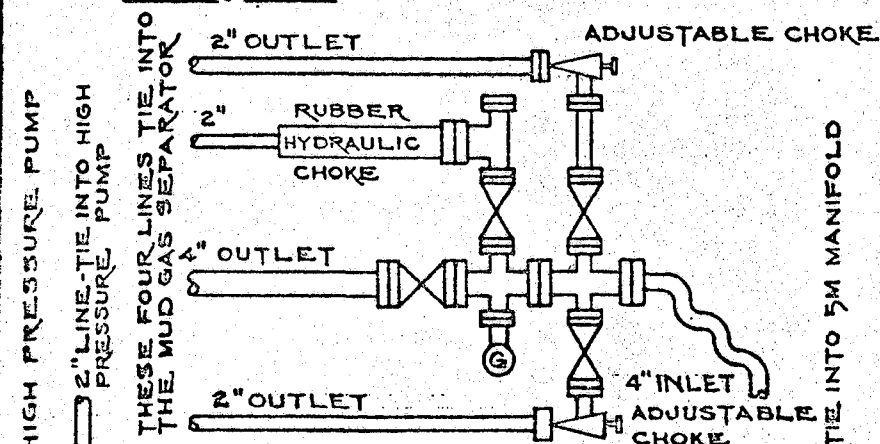
"LASPI. JUNCTION. UTAH" 1954 (24 $\frac{12}{50}$ = 6460)

PLAT OF HUSKY FEDERAL 4-31
IN LOT 1, SECTION 31, T24S, R24E S.L.B.M.
SAN JUAN COUNTY, UTAH.
FOR: HUSKY OIL CO.
SCALE - 1"=1000' MARCH 1952
TRANSIT & DISTANCE METER SURVEY





MINIMUM CHOKE MANIFOLD FOR 3M



LEGEND

- (G) PRESSURE GAUGE
- (1) CASING HEAD w/2-2" OUTLETS
- (2) DRILLING SPOOL w/2 FLGD. OUTLETS
- (3) RAM TYPE BOP w/PIPE RAMS
- (4) RAM TYPE BOP w/BLIND RAMS
- (5) HYDRIL BOP (ANNULAR TYPE)
- (6) BELL NIPPLE
- (7) FLOWLINE MINIMUM SIZE 8" L.P.
- (8) 2" FILL UP LINE AT RIGHT ANGLE TO FLOW LINE (7)
- (9) HYDRAULICALLY OPERATED VALVE

2	8-71	CR	ADD MANIFOLD FOR 3M
3	8-71	VM	NUMEROUS REVISIONS
NO.	DATE	BY	ALTERATION

BLOWOUT PREVENTER REQUIREMENTS FOR

HUSKY OIL COMPANY
600 SOUTH CHERRY
DENVER, COLORADO

DRAWN NVS-VSM	DWG. NO.
CHECKED COM'D	SCALE NONE
	DATE 10-10-69

BOP

MULTI-POINT REQUIREMENTS
TO ACCOMPANY FORM 9-311-C

Husky 4-31 Federal

1. Existing Roads

- A. See attachments, Exhibits "A", "B", and "E"
- B. Main Roads:

To reach Husky well location 4-31 in the northwest corner of Section 31, Township 24 East, Range 29 South, proceed south from Moab Town, Utah, on U. S. Highway 163 for 22 miles; exit to the east on Utah State Highway 46 and proceed five miles toward La Sal Town, Utah. Exit south on blacktop unmarked county road, locally referred to as the Lisbon Valley Road. Proceed south two miles. Exit off blacktop road to the right (west) on a dirt road. (Gulf well marker). Proceed down this road 2.2 miles at which point the road forks. Take the left fork and proceed approximately 1.5 miles. The proposed access road is flagged on the left side of the road at this point. (See Exhibits "A", "B", and "E" depicting access road and location).

2. Planned Access Roads, Exhibit "E"

- A. Width: $\pm 16'$ (maximum)
- B. Maximum Grades: overall road grade - 4%
- C. Turnouts: none
- D. Drainage Design: none required
- E. Location and size of culverts: none fill $\pm 3'$
- F. Surface material: sand and clay
- G. Necessary gates: none
- H. Center line flagging presently center line flagged and surveyed (see Exhibit "E")

3. Location of Existing Wells, Exhibit "B"

There are no known wells within the NW/4 of the NW/4 of Section 31-24E-29S. There are three (3) known well locations within a two (2) mile radius of the above-designated location. One well, Gulf #1 Chevron, a producing oil well, is 1.45 miles northwest by west. The second, Husky 15-25 Federal, is located one-half mile northwest. The third, Kimbarr #1 Gulf State, is located 1.9 miles southwest. All distances are given from the proposed location of the Husky 4-31 Federal.

4. Location of Existing and/or Proposed Facilities

- A. There are no facilities owned or controlled by the lessee/operator within a one-mile radius from the aforementioned proposed location.
NOTE: The word facilities as used in the context of the above and subsequent paragraphs denotes the following:

MULTI-POINT REQUIREMENTS
TO ACCOMPANY FORM 9-311-C

Husky 4-31 Federal

1. Tank batteries
2. Production facilities
3. Oil gathering lines
4. Gas gathering lines
5. Injection lines
6. Disposal lines

B. New Facilities Contemplated in the Event of Production
(See Production Layout Exhibit "C")

1 - 4: The production facilities (proposed) are shown on an attachment. It will be installed on the drilling location adjacent to the access road, to be constructed, to minimize surface disturbance. The battery facilities will be approximately 50' x 100', fenced to protect livestock and wildlife and will be constructed of soil material at the site. The proposed pit will be approximately 25' x 25' and will be in compliance with U.S.G.S. NTL-2B specifications.

Any necessary completion equipment on location site will be removed upon completion of the well. At this point in time, it is planned to transport any future production via pipeline to gas line tie-in.

C. Plan for Rehabilitation of Disturbed Areas No Longer Needed for Operation after Construction is Completed
(See Exhibit "C" and Section 10)

The reserve pit and other areas no longer needed for operation will be rehabilitated by seeding the areas, after leveling, with designated range grass when moisture content of the soil is adequate to insure germination. (As per BLM Area Representative)

5. Location and Type of Water Supply

The water used to drill this well will be hauled by truck from a private source. The trucks will utilize the proposed location access road as depicted in Exhibit "B" and "E".

6. Source of Construction Materials

A, B, C, and D: For the drilling operation it is not anticipated that any construction materials will be needed; however, should they be needed, they will be purchased from a commercial source.

7. Methods of Handling Waste Material Disposal

- A. Cuttings: To be disposed of in the reserve pit and buried.
- B. Drilling Fluids: To be disposed of in the reserve pit and buried after the pit has dried.
- C. Produced Fluids: Such liquids shall be produced into tanks.
- D. Sewage: Portable toilets
- E. Garbage and Other Waste Material: Disposal in a "burn" pit, enclosed on four sides and top with a wire mesh screen, ultimately buried. See Exhibit "D".
- F. The access road will be patrolled daily for trash pick-up that will be disposed of under item 7-E.
- G. The location will be cleaned upon completion of the well. All pits will be fenced. After the reserve pit has dried, the pits will be filled, waste buried, and restoration done as per Section 10.

8. Location of Camps and Ancillary Facilities

None

9. Well Site Layout (See Exhibit "D")

- A, B, and C: See attached plats
- C. The pits will be lined to prevent seepage.

10. Plans for Restoration of the Surface

After the drilling and completion operations have ceased, the mud pits will be fenced and allowed to dry. After the pit has dried out (several weeks), the fence will be removed. It will be filled in and leveled to conform with the topography of the land. At this time, the trash pit will also be backfilled and leveled. The remainder of the well site, in addition to the above-mentioned pits, will be seeded with a designated range grass when the moisture content of the soil is adequate to insure seed germination. The proper range grass and information as to adequate moisture content of the soil will be furnished by the Area BLM Representative.

11. Other Information

- A. The location area is situated in the upper portion of the erosion zone where a plateau area terminates. The terrain is very broken and rugged with deep gullies and vertical cliffs. Numerous drainages, intermittent in nature, drain into Hook and Ladder Gulch, which in turn drain into intermittent Cane Creek. The location is to be built on a fairly level outcrop of Navajo sandstone, sparsely vegetated with pine trees, low desert shrubs, and grasses. The area supports minimal wildlife, small reptiles, rodents, mammals, and birds.

MULTI-POINT REQUIREMENTS
TO ACCOMPANY FORM 9-311-C

Husky 4-31 Federal

- B. The primary use of the land is range land and is owned by the BLM
- C. Only intermittent streams are in the area. There are no known occupied dwellings, historical, or cultural sites in the immediate area.

12. Lessee's or Operator's Representative:

C. H. Walter
600 South Cherry Street
Denver, Colorado 80222
303/320-4040

13. Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access road; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Husky Oil Company and its contractors and subcontractors in conformity with this plan and conditions under which it is approved.

4/24/78
Date

C. H. Walter
Drilling Engineer
Husky Oil Company

EXHIBITS

- A. Map with route marked
- B. 7.5 minute topographic map section showing access roads, location, culvert placement and water haul route
- C. Proposed production facilities
- D. Location layout with burn pit
- E. Topographic sketch of location
- F. Cross section of location showing cuts and fills
- G. Stimulation Schematic
- H. Access Road Survey
- I. Closed Mud System Plan

EXHIBIT "A"
Topographic Map Section



- Existing Road
- Proposed Access Road
- Water Haul Route

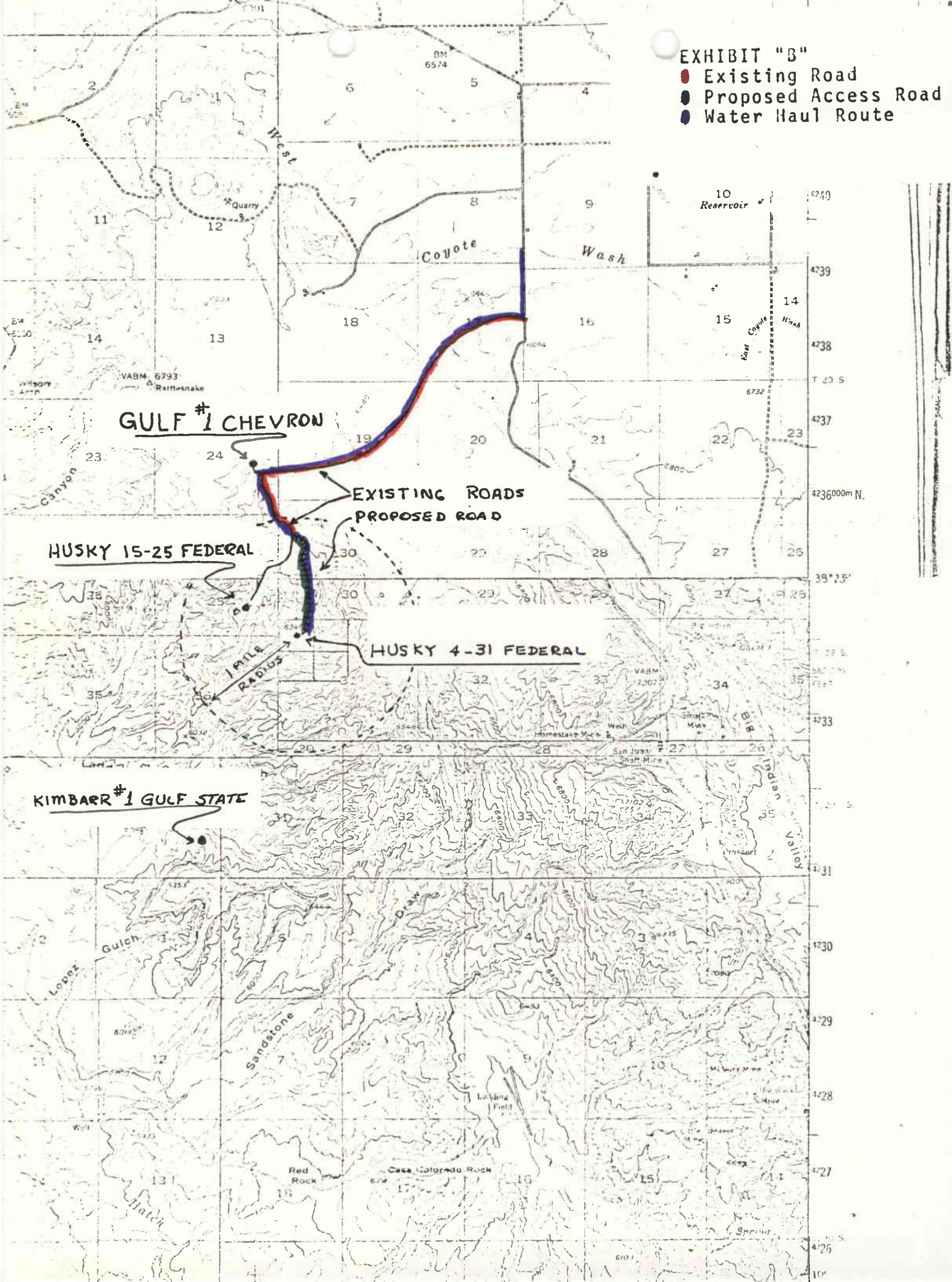
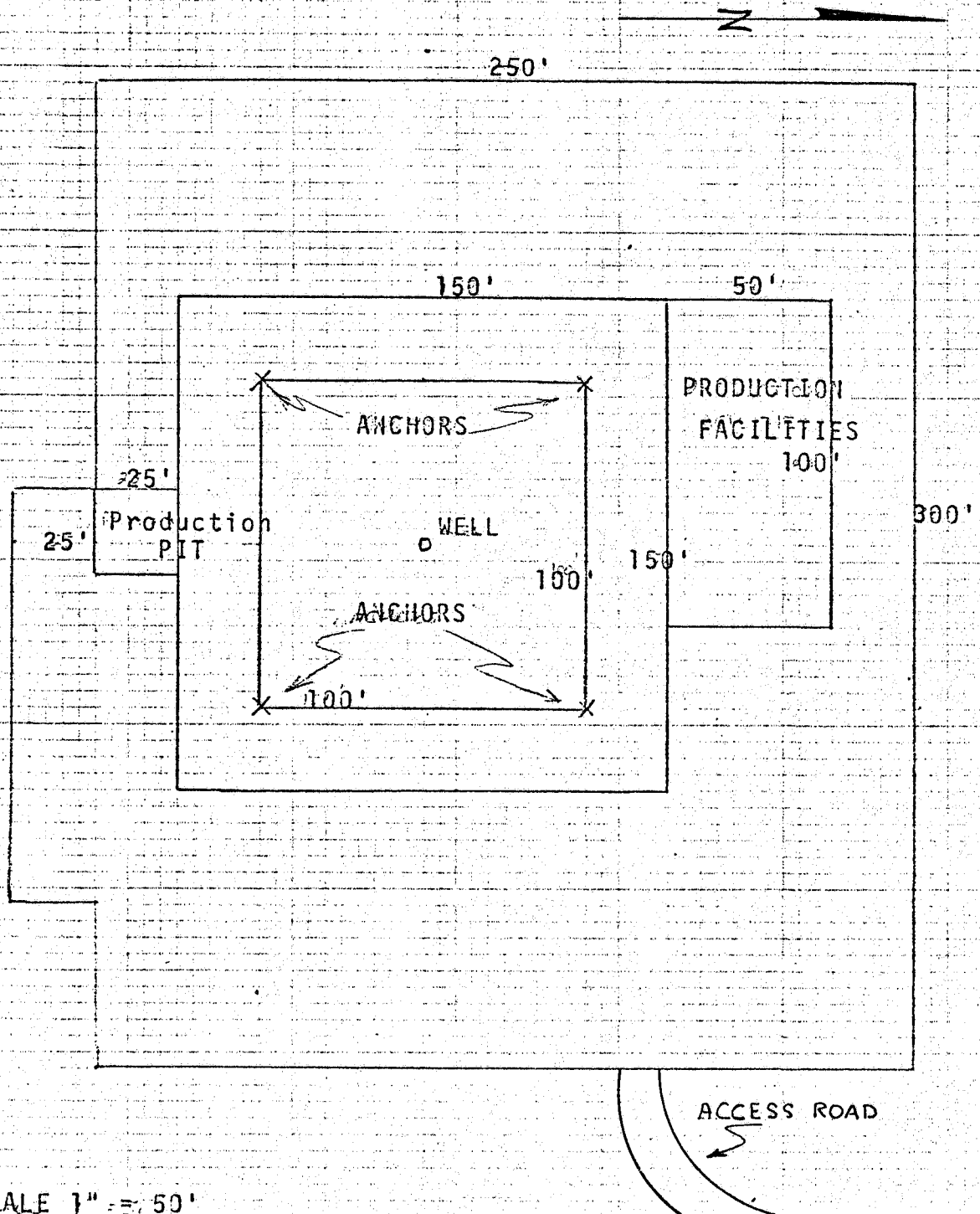
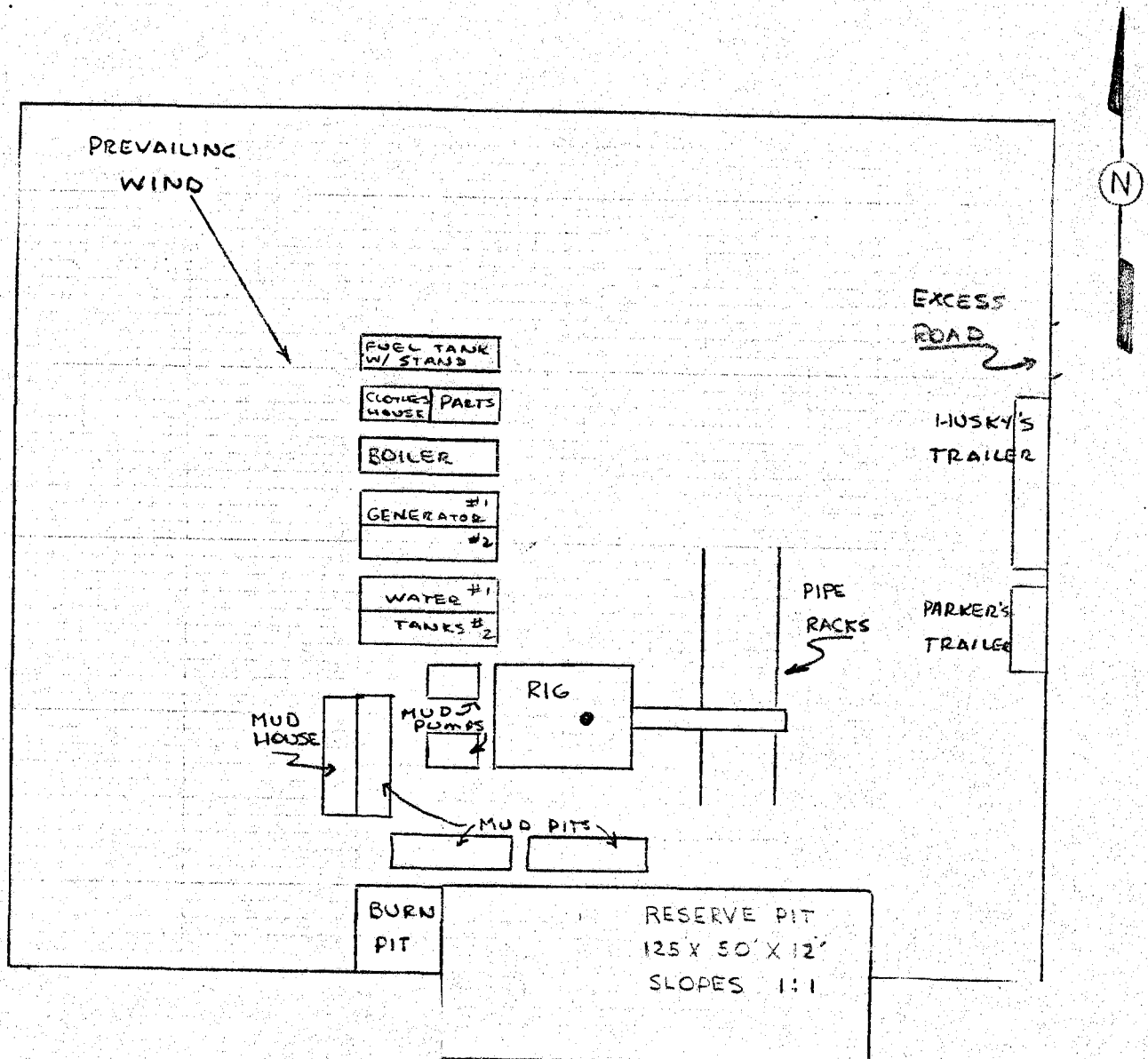


EXHIBIT "C"
Proposed Production Facilities



SCALE 1" = 50'
G. H. Walter

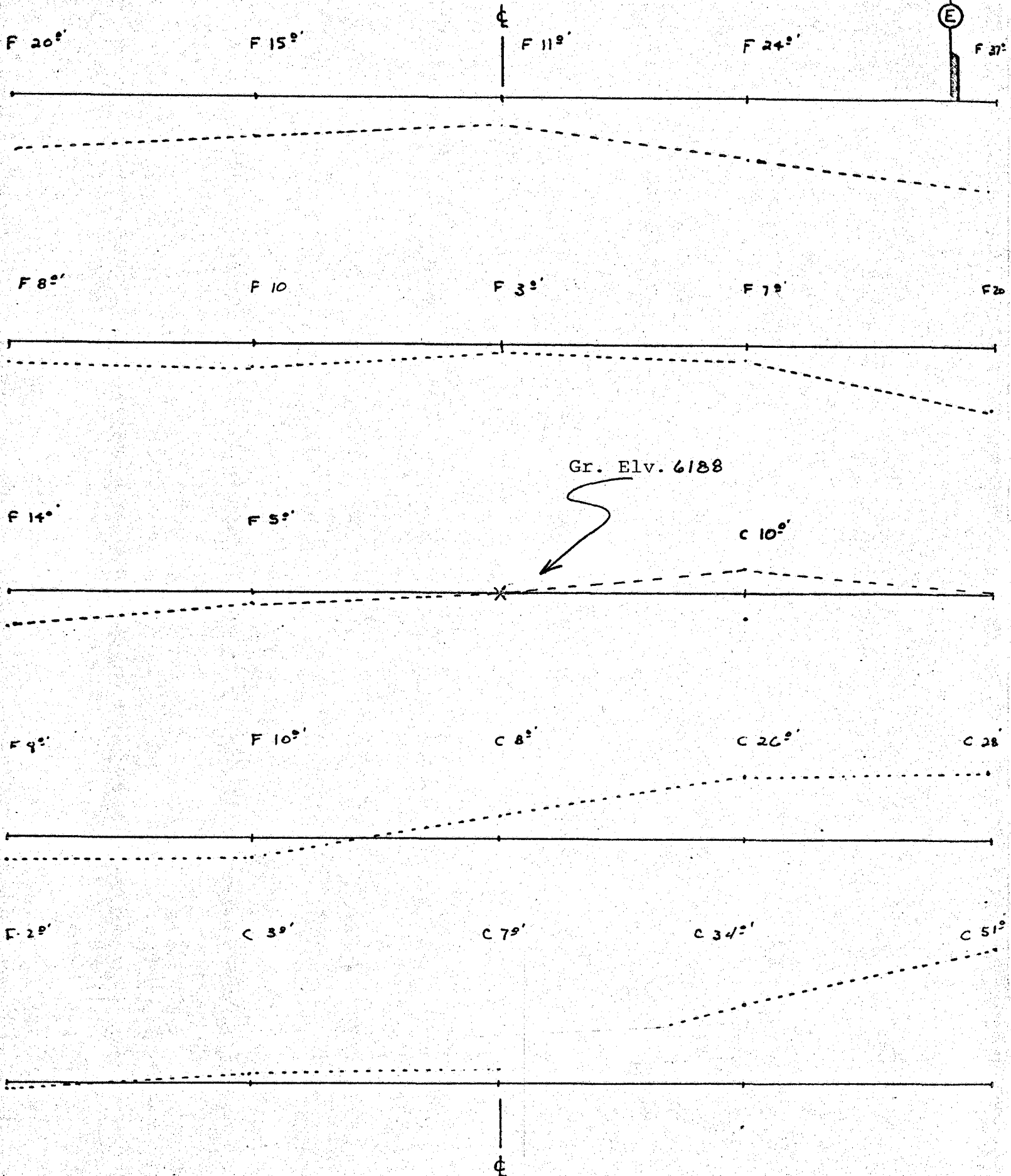
EXHIBIT "D"
Location Layout with Burn Pit



SCALE : 1" = 50'

EXHIBIT "F"
Cross Section

(E)

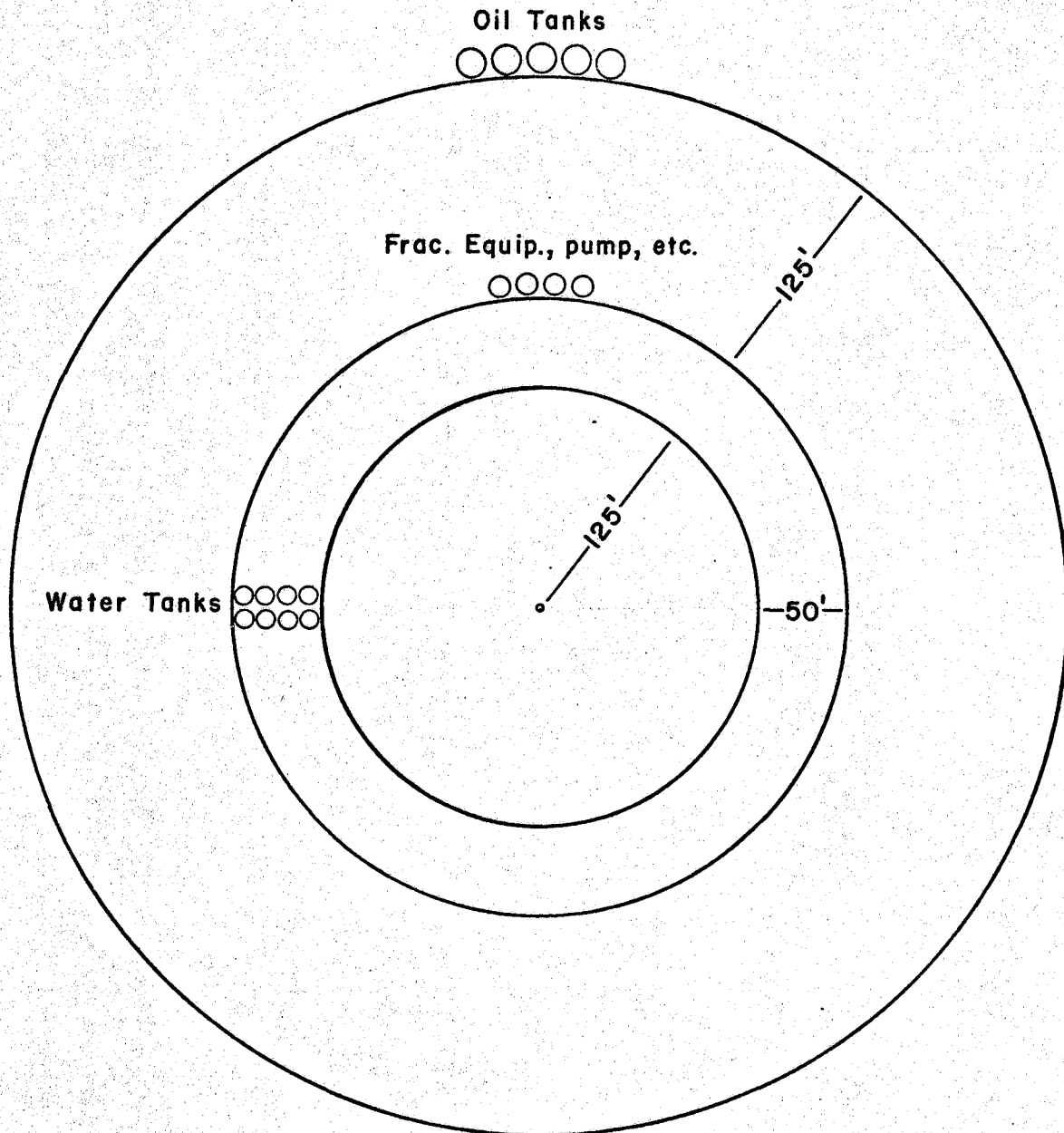


Scale: 1" = 50'

HUSKY OIL COMPANY
600 S. CHERRY STREET

EXHIBIT "G"
Stimulation Schematic

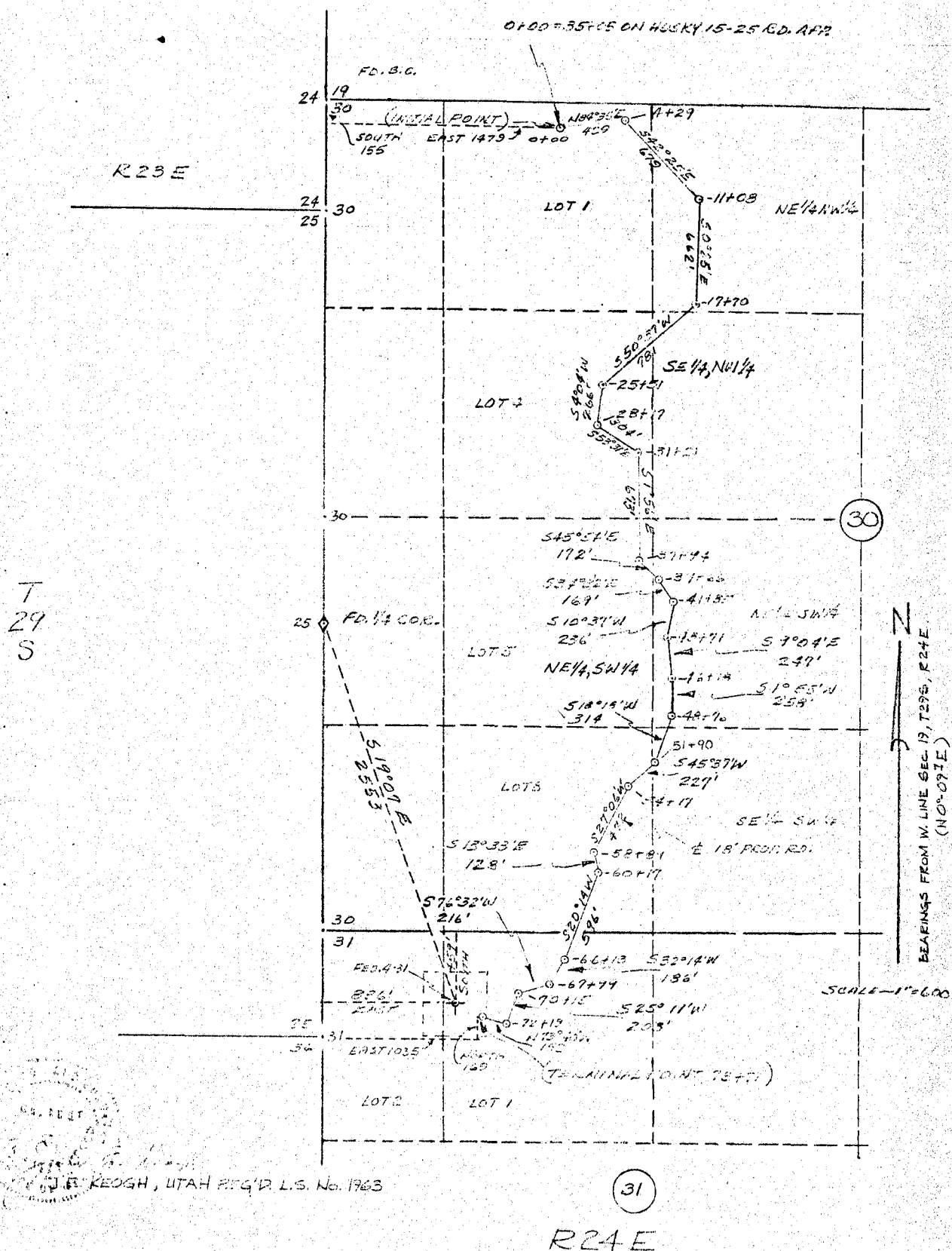
125' from flammable storage
to source of ignition
125' from pump to well



1" = 100'

FRAC. SCHEMATIC

SCALE: 1" = 600' MARCH, 1978
TRANSIT & DISTANCE METER SURVEY



PLANNED "CLOSED" MUD SYSTEM
HUSKY 4-31 FEDERAL

In the interest of pollution protection and economics (rehabilitation costs-drilling costs), Husky Oil Company is proposing to run a closed mud system on the above-captioned well. This report presents a guideline that Husky Oil Company is planning to adopt on the Husky 4-31 Federal in San Juan County, Utah.

In the past, solids removal equipment discarded solids into the reserve pit along with some liquid phase of the drilling fluid. From time to time the pits were dumped to clean solids build-up from the bottom of the mud pits. The discarded solids and liquids have in the past presented problems for rehabilitation of the site, not to mention the time before rehabilitation can commence.

The closed system is designed to retain the liquid phase and discard damp solids into the reserve pit.

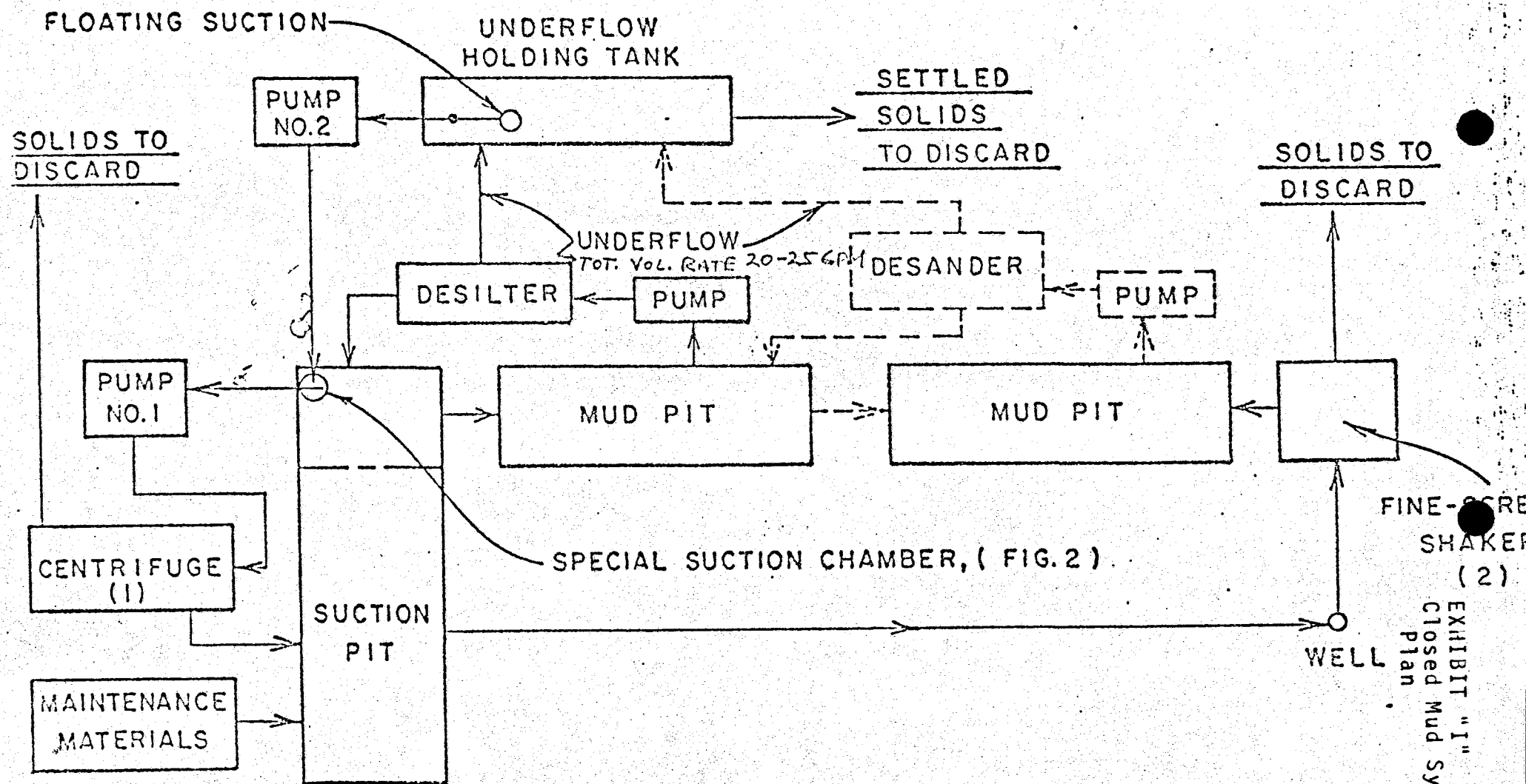
The following four (4) point plan describes in detail the step-by-step plan of a closed system.

1. Preferably, replace the desander and conventional shale shaker with a fine screen shaker; otherwise, use a conventional shaker, desander, and desilter in the normal operating mode.
2. Run the underflow from the desilter (and desander) into a holding tank or pit equipped with a floating suction and with facilities for periodically cleaning out settled coarse solids. If a surface pit is to be used, it can be bulldozed over when filled with sediment and a new pit dug.
3. Install a decanting centrifuge with two feed pumps. Pump No. 1 draws mud from the active system (through a special suction chamber) downstream from the desilter, and feeds the centrifuge at its maximum process rate. Pump No. 2 draws liquid from near the surface (floating suction) of the holding tank and feeds into the bottom of the special suction chamber for Pump No. 1. The flow rate from Pump No. 2 must be higher than the rate of underflow liquid from the desilter into the holding tank, but always less than the rate of Pump No. 1. A liquid level "switch" at the holding tank could start and stop Pump No. 2 in respond to supply of liquid; thus, the whole system would operate automatically. The centrifuge underflow, consisting of moist solids, is discarded, and the clean mud returned to the active mud system at a point downstream from the No. 2 pump suction.

4. Make-up water and chemical are added in amounts necessary to maintain the necessary volume and required mud properties.

Note that the only materials removed from the mud system are moist solids at the shale shaker and at the decanting centrifuge, plus sediment removed by period cleaning of the holding tank.

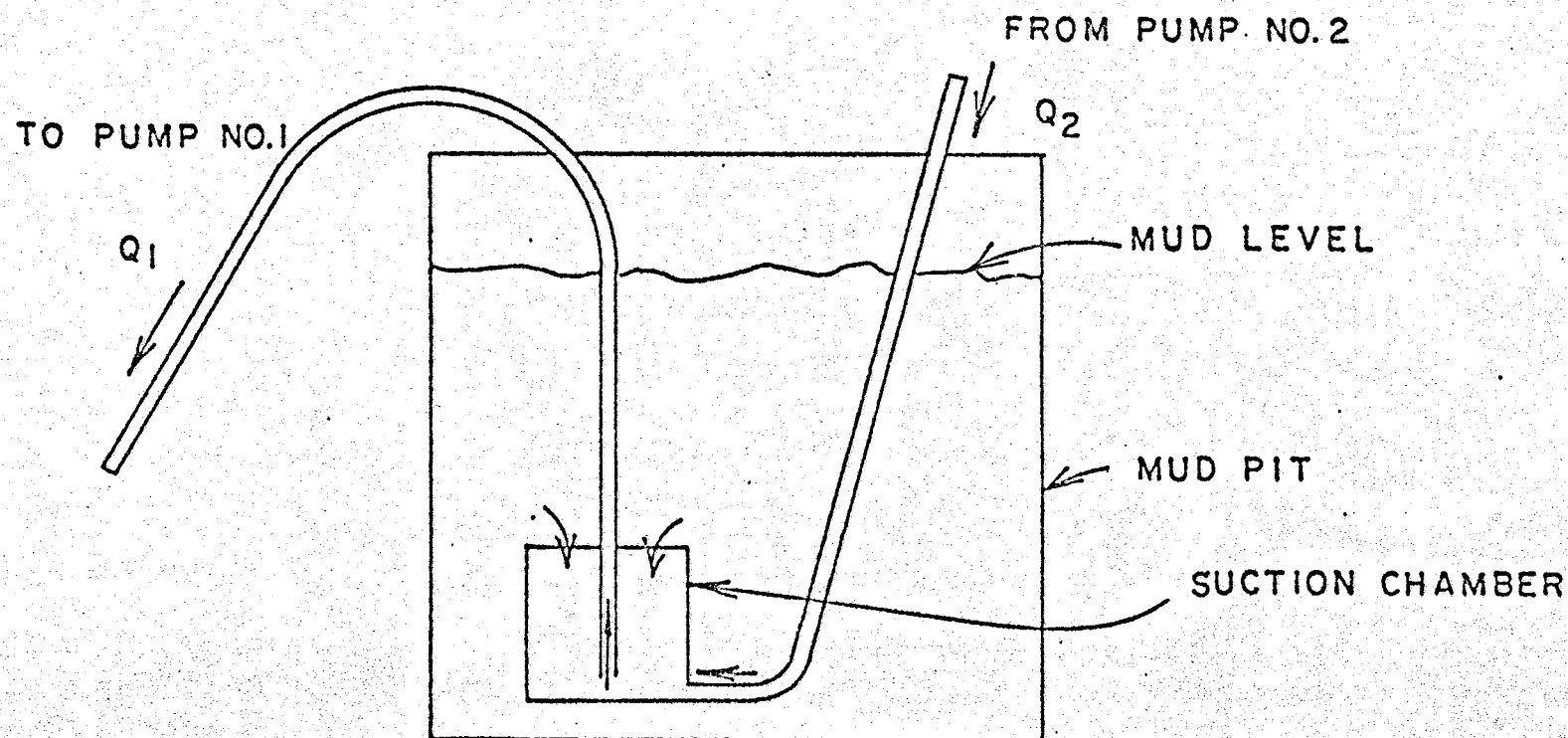
FIGURE 1
A CLOSED SYSTEM FOR PROCESSING NON-WEIGHTED DRILLING MUDS



- (1) BIRD-TYPE CENTRIFUGE, AS SUPPLIED BY (a) PIONEER OR (b) BAROID
(2) FINE-SCREEN SHAKER, AS SUPPLIED BY (a) MUD SEPARATORS, INC. OR (b) DRESSER MAGCOBAR

FIGURE 2
SPECIAL SUCTION CHAMBER

$$Q_1 > Q_2$$



Q₂ MUST BE LESS THAN Q₁

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

** FILE NOTATIONS **

Date: May 1, 1978
Operator: Slusky Oil Co.
Well No: Hook + Ladder 4#1
Location: Sec. 31 T. 29S R. 24E County: San Juan

File Prepared: ☐ Entered on N.I.D.: ☐
Card Indexed: ☐ Completion Sheet: ☐

API NUMBER: 43-037-30435

CHECKED BY:

Administrative Assistant [Signature]

Remarks: Unit

Petroleum Engineer [Signature]

Remarks:

Director [Signature]

Remarks:

- Closest mining activity
is 1 1/2 to 2 miles
in distance

INCLUDE WITHIN APPROVAL LETTER:

Bond Required: ☒ Survey Plat Required: ☐

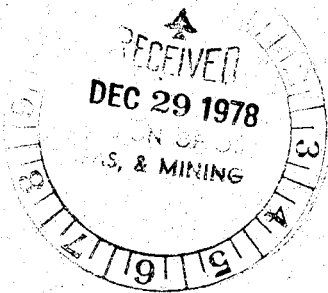
Order No. ☐ Surface Casing Change to ☐

Rule C-3(c), Topographic exception/company owns or controls acreage within a 660' radius of proposed site ☐

O.K. Rule C-3 ☐ O.K. In Hook + Ladder Unit ☒

Other:

☒ Letter Written/Approved



Federal Building
701 Camino del Rio
Durango, Colorado 81301

December 27, 1978

Husky Oil Company
600 South Cherry Street
Denver, Colorado 80222

Gentlemen:

By telephone, Larry Diede advised this office that Husky would not drill Well No. 4-31 Federal, located in the NW $\frac{1}{4}$ NW $\frac{1}{4}$ section 31, T. 29 S., R. 24 E., S.L.M., San Juan County, Utah, on Federal oil and gas lease U-13028.

Application for Permit to Drill has not been approved and access road or well pad construction had not commenced.

Application for Permit to Drill is cancelled this date and is returned herewith unapproved. If at some later date you decide to drill this well, it will be necessary to file a new application.

Sincerely yours,

(Orig. Sgd.) C. A. BARRICK
Carl A. Barrick
Acting District Engineer

Enclosure

cc: BLM Moab
Utah Div. of Oil, Gas & Mining